

Section I. (Amendments to the Specification)

Please replace paragraph [0073] of the specification with the following new replacement paragraph [0073]:

[0087] The program next prompts the operator to turn the gas supply vessel lock-out switch to "off" and to lock the automatic gas supply vessel valve in the closed position and then to press "Enter." Once "Enter" has been pressed the purge inlet pressure is checked at pressure sensor PS-01. If there is sufficient pressure, automatic valve AV-12 is opened and the pressure is verified at pressure transducer ~~PT-01~~ PT-11. If the purge pressure is determined to be insufficient during these two steps, then the system will alarm and wait for operator input. Automatic valve AV-11 will open to pressurize the "stick" (portion of the manifold associated with a given vessel) up to the gas supply vessel valve. After a short delay, automatic valve AV-12 closes, the pressure value is captured and the pressure leak-down test timer starts. If the leak-down rate is less than the value in the set-up table, the leak test will conclude successfully. Upon successful completion of the leak test, the Local Purge Cycle screen will appear.

Please replace paragraph [0074] of the specification with the following new replacement paragraph [0074]:

[0074] The second cylinder change screen is the Local Purge Cycle screen, and is shown in FIG. 10. To start the local purge cycle, automatic valve ~~AV-14~~ AV-15 opens, and the vacuum level is checked at vacuum sensor VS-01. Once the vacuum sensor is satisfied and responsively closes, the vent isolation valve AV-13 is opened and the vacuum level at pressure transducer ~~PT-01~~ PT-11 is compared to the value in the set-up parameters of the system. When the sensed pressure of the pressure transducer ~~PT-01~~ PT-11 is below the pre-programmed vacuum level, the vent valve, AV-13, is closed and the purge valve, AV-12, is opened, thereby pressurizing the gas stick to the preset purge gas pressure. The above sequence is repeated for the number of cycles established in the set-up routine in the system program. After completing the cycles, the next screen in the Cylinder Change procedure is displayed.

Please replace paragraph [0076] of the specification with the following new replacement paragraph [0076]:

[0076] The screen shown in FIG. 12 is a Post Cylinder Change Leak Test screen. The post cylinder change leak test is a rate of rise or "leak-up" test. The system is evacuated by the Local Evacuation procedure, using vacuum from the Pump/Scrubber, and then sealed and the pressure monitored for any upward change indicating a leak. As soon as the protocol is entered, automatic valve ~~AV-14~~ AV-15 opens and after a short delay, automatic valve AV-13 opens to evacuate the system. The vacuum level is measured by pressure transducer PT-11. After a brief stabilization delay, automatic valve AV-13 closes and the vacuum level is captured. At this point, the timer starts and runs for the time determined by the system set-up program. If the vacuum has not changed more than the set-up program allows, the system has passed the post change leak test.

Please replace paragraph [0082] of the specification with the following new replacement paragraph [0082]:

[0082] Next, the local pump purge operation is carried out, by selecting the "LOCAL PUMP PURGE" menu from the appropriate gas supply vessel "CYLINDER MENU" to generate the screen shown in FIG. 18 and initiate the operation, which begins by performing a "LOCAL EVACUATION" function as described hereinabove. When the vacuum level at pressure transducer PT-11 or PT-21 is below the minimum vacuum setpoint, the evacuation timer begins counting. When the timer counts out, automatic valve AV-13 or AV-23 closes, pressure sensor PS-01 checks that there is sufficient purge pressure, and automatic valve AV-12 or AV-22 opens to deliver purge gas to the stick. When the pressure at pressure transducer PT-11 or PT-21 is greater than the minimum purge pressure setpoint, the purge timer begins counting. When this timer counts out, the purge gas automatic valve AV-12 or AV-22 is closed and the venturi isolation valve ~~AV-013~~ AV-13 or AV-23 opens to evacuate the stick back to the cylinder valve. This sequence is repeated for the programmed number of cycles, automatically ending with evacuation of the manifold. During this sequence, the tool

is isolated from the gas cabinet by closing the manual stick isolation valve.

Please replace paragraph [0087] of the specification with the following new replacement paragraph [0087]:

[0087] The Pump component can also be a constituent of an extractor module 100 as shown in FIG. 19, which may comprise a pump and a surge tank (not shown in FIG. 19; see FIG. 20, described more fully hereinafter), along with controls and safety systems appropriate for safe operation. The extractor system components may be housed in an exhausted and monitored enclosure, with the gas delivery hardware being housed in a main cabinet 102 equipped with viewing window 108, and with associated control electronics being located in a separate enclosure 104 mounted on the top of the main cabinet ~~104~~ 102, in a manner generally analogous to the hardware and electronics arrangement of the reduced pressure monitor as described hereinabove.

Please replace paragraph [0090] of the specification with the following new replacement paragraph [0090]:

[0090] The main cabinet 102 thus constitutes a pumper cabinet that encloses a surge tank 120 and an extractor pump 122, as shown in FIG. 20, process plumbing and the purge and vent plumbing and is monitored for exhaust pressure. The surge tank can be of any suitable volume, e.g., from about 25 liters to about 150 liters, as appropriate to the specific gas delivery operation involved. The window 108 in the upper door of the main cabinet 102 is a fire-rated safety glass window to allow visual inspection of the condition of the manifold prior to opening the door. The doors are suitably secured with manual twist latches. The color touch screen interface 106, EMO ~~{give the full name, please}~~ (Emergency Machine Off) button and the START button are located on the front of the electrical enclosure 104 on top of the main cabinet 102.

Please replace paragraph [0095] of the specification with the following new replacement paragraph [0095]:

[0095] To start the pump, the operator selects "PUMP CONTROL" from the "MAIN MENU" to generate the screen shown in FIG. 22, and the "Pump Run" selection is

made on the screen. If the pressure in the surge tank is below the set point (e.g., ~600 Torr), the pump will turn on to bring the pressure up to the set point. A screen display will then appear, directing the operator to open the manual valve MV-1 (not shown in FIG. 22, but which is disposed in the "TO VMB" (Valve Manifold Box) line shown at the right-hand portion of the drawing), in order to open the flow path of the system to the downstream process tool. After the operator confirms that the manual valve is open, and that the gas delivery operation should commence, the pneumatic outlet block valve AV-4 is opened by the system to effect gas flow to the tool. To turn off the pump, the "Pump Stop" selection is made on the Pump Control screen shown in FIG. 22. The system will then stop the pump and isolate the system by closing valves AV-1 and AV-4.

Please replace paragraph [0096] of the specification with the following new replacement paragraph [0096]:

[0096] The extractor module is also selectively actuatable to carry out evacuation and purging operations, involving valves MV-1, MV-3, AV-1, AV-2, AV-3, AV-4 and AV-7. A manual mode of operation is also accommodated by the system.